

## **ABSTRACT**

*Big data is a hot topic that is being developed for agencies and research around the world thanks to new technologies, tools and means of communication. The amount of data produced is now increasing every year, and it is possible to collect big data every day. Big data can be found in government agencies, private companies, even in schools. One of them is the Benteng Gading Jakarta Vocational School which already has alumni of more than 300 students, and this alumni data can be used to find out how many students are already working or continuing their education. In this final project, a big data prototype design using Apache Hadoop is made with the data used is alumni data from the Benteng Gading High School Jakarta. This prototype aims to improve performance which previously only used conventional techniques, big data design using Apache Hadoop as a place to process existing data with processing results from the previous three generations, namely 2018/2019, working as much as 60%, studying as much as 32% and not yet study/work as much as 8%, then in 2019/2020, work as much as 51%, study as much as 28% and have not studied/work as much as 21%, and the last year 2020/2021, work as much as 28%, study as much as 17% and have not study/work as much as 55%, so the results of the processing carried out by Hadoop are successful.*

Keywords: Benteng Gading Vocational High School, Apache Hadoop, Big data.